

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 39**

[Docket No. 2001-NM-124-AD]

RIN 2120-AA64

**Airworthiness Directives; Boeing Model 747-100, 747-200, 747-300, and 747SR Series Airplanes Powered by General Electric CF6-45/50 or Pratt & Whitney JT9D-70 Series Engines****AGENCY:** Federal Aviation Administration, DOT.**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** This document proposes the superseding of an existing airworthiness directive (AD), applicable to certain Boeing Model 747-100, 747-200, 747-300, and 747SR series airplanes powered by General Electric CF6-45/50 or Pratt & Whitney JT9D-70 series engines, that currently requires a detailed visual inspection of the outboard diagonal brace for heat damage and cracking; and follow-on repetitive inspections and corrective actions, if necessary. This action proposes to require accomplishment of the previously optional replacement of any existing sealant with heat-resistant sealant as terminating action for the repetitive inspections required by this AD. This proposal is prompted by reports of heat damage to the forward end of the diagonal brace after accomplishment of a previous strut and wing modification. The actions specified by the proposed AD are intended to prevent heat damage to the diagonal brace, which could cause cracking, fracture, and possible loss of the diagonal brace load path and consequent separation of the strut and engine from the airplane.

**DATES:** Comments must be received by October 19, 2001.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2001-NM-124-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays. Comments may be submitted via fax to (425) 227-1232. Comments may also be sent via the Internet using the following address: 9-anm-nprmcomment@faa.gov. Comments sent via fax or the Internet must contain "Docket No. 2001-NM-124-AD" in the

subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 for Windows or ASCII text.

The service information referenced in the proposed rule may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

**FOR FURTHER INFORMATION CONTACT:** Tamara Anderson, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2771; fax (425) 227-1181.

**SUPPLEMENTARY INFORMATION:****Comments Invited**

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this action may be changed in light of the comments received.

Submit comments using the following format:

- Organize comments issue-by-issue. For example, discuss a request to change the compliance time and a request to change the service bulletin reference as two separate issues.
- For each issue, state what specific change to the proposed AD is being requested.
- Include justification (e.g., reasons or data) for each request.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this action must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2001-NM-124-AD."

The postcard will be date stamped and returned to the commenter.

**Availability of NPRMs**

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2001-NM-124-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

**Discussion**

On June 4, 2001, the FAA issued AD 2001-12-05, amendment 39-12260 (66 FR 31527, June 12, 2001), applicable to certain Boeing Model 747-100, 747-200, 747-300, and 747SR series airplanes powered by General Electric CF6-45/50 or Pratt & Whitney JT9D-70 series engines, to require a detailed visual inspection of the outboard diagonal brace for heat damage and cracking; and follow-on repetitive inspections and corrective actions, if necessary. That action was prompted by reports of heat damage to the forward end of the diagonal brace after accomplishment of the modification of the nacelle strut and wing structure per AD 95-13-07, amendment 39-9287 (60 FR 33336, June 28, 1995).

**Actions Since Issuance of Previous Rule**

In the preamble to AD 2001-12-05, the FAA specified that the actions required by that AD were considered "interim action" and that the FAA was considering further rulemaking action to supersede that AD to require removal of the existing sealant and replacement with heat-resistant sealant, which would constitute terminating action for the repetitive inspections required by that AD action. The FAA now has determined that further rulemaking action is indeed necessary, and this proposed AD follows from that determination.

The FAA has determined that long-term continued operational safety will be better ensured by modifications or design changes to remove the source of the problem, rather than by repetitive inspections. Long-term inspections may not be providing the degree of safety assurance necessary for the transport airplane fleet. This, coupled with a better understanding of the human factors associated with numerous repetitive inspections, has led the FAA to consider placing less emphasis on special procedures and more emphasis on design improvements. The proposed corrective actions are consistent with these considerations.

### Explanation of Requirements of Proposed Rule

Since an unsafe condition has been identified that is likely to exist or develop on other products of this same type design, the proposed AD would supersede AD 2001-12-05 to continue to require a detailed visual inspection of the outboard diagonal brace for heat damage and cracking; and follow-on repetitive inspections and corrective actions, if necessary. This proposal would also require replacing any existing sealant with heat-resistant sealant, and either replacing or repairing the diagonal brace, if necessary, which constitutes terminating action for the repetitive inspections required by this proposed AD.

### Difference Between the Proposed Rule and Service Bulletin

Operators should note that the service bulletin specifies that the diagonal brace may either be replaced per the service bulletin, or the manufacturer may be contacted for possible alternative rework (repair) instructions. However, paragraph (c)(2)(ii) of this proposed AD specifies that the repair be accomplished per a method approved by the Manager, Seattle Aircraft Certification Office, FAA; or per data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative who has been authorized by the Manager, Seattle ACO, to make such findings.

### Cost Impact

There are approximately 145 Model 747 series airplanes of the affected design in the worldwide fleet. The FAA estimates that 39 airplanes of U.S. registry would be affected by this proposed AD.

The repetitive inspections that are currently required by AD 2001-12-05 take approximately 1 work hour per airplane to accomplish, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the currently required actions is estimated to be \$2,340 per airplane, per inspection cycle.

The terminating action that is proposed in this AD action would take approximately 2 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Required parts would cost approximately \$100 per airplane. Based on these figures, the cost impact of the proposed requirements of this AD is estimated to be \$8,580, or \$220 per airplane.

The cost impact figures discussed above are based on assumptions that no

operator has yet accomplished any of the proposed requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

### Regulatory Impact

The regulations proposed herein would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this proposal would not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this proposed regulation (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) if promulgated, will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the draft regulatory evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption

### ADDRESSES.

### List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

### The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

### PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

**Authority:** 49 U.S.C. 106(g), 40113, 44701.

#### § 39.13 [Amended]

2. Section 39.13 is amended by removing amendment 39-12260 (66 FR 31527, June 12, 2001), and by adding a new airworthiness directive (AD), to read as follows:

**Boeing:** Docket 2001-NM-124-AD.  
Supersedes AD 2001-12-05,  
Amendment 39-12260.

**Applicability:** Model 747-100, 747-200, 747-300, and 747SR series airplanes; certificated in any category; powered by General Electric CF6-45/50 series engines, or Pratt & Whitney JT9D-70 series engines.

**Note 1:** This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

**Compliance:** Required as indicated, unless accomplished previously.

To prevent heat damage to the diagonal brace, which could cause cracking or fracture of the diagonal brace, and possible loss of the diagonal brace load path and consequent separation of the strut and engine from the airplane, accomplish the following:

### Restatement of Certain Requirements of AD 2000-12-05

#### Verification

(a) Within 90 days after June 27, 2001 (the effective date of AD 2001-12-05), do the actions required by paragraph (a)(1) or (a)(2) of this AD, as applicable.

(1) If an operator's maintenance records verify that, during the accomplishment of AD 95-13-07, amendment 39-9287, the seal backup plates were restored and BMS 5-63 high-temperature sealant was used in that restoration, no further action is required by this AD.

(2) If an operator's maintenance records do not verify that the actions specified in paragraph (a)(1) of this AD were accomplished, do the actions required by paragraph (b) of this AD.

#### Inspections and Corrective Actions

(b) Within 90 days after June 27, 2001, do the inspections and applicable corrective actions specified by paragraphs (b)(1) and (b)(2) of this AD per the Accomplishment Instructions of Boeing Alert Service Bulletin 747-54A2208, dated March 29, 2001. Thereafter, repeat the inspections at intervals not to exceed 6 months, until accomplishment of paragraph (c) of this AD.

#### Outboard Strut Diagonal Brace

(1) Do a detailed visual inspection of the forward 20 inches of the outboard strut diagonal brace, including all areas of the forward clevis lugs and brace body, for signs of heat damage or cracks, per Part 1 of the Accomplishment Instructions of the service bulletin.

(i) If no sign of heat damage or cracking is found, repeat the detailed visual inspection

at intervals not to exceed 6 months per the service bulletin, until accomplishment of paragraph (c) of this AD.

(ii) If any primer discoloration is found, before further flight, do a non-destructive test (NDT) inspection of the area to determine if the diagonal brace has heat damage per Part 1 of the Accomplishment Instructions of the service bulletin.

(A) If no heat damage is found during the NDT inspection, and no cracking is found during the detailed visual inspection, repeat the detailed visual inspection specified by paragraph (b)(1) of this AD at intervals not to exceed 6 months.

(B) If any heat damage is found during the NDT inspection, or any cracking is found during the detailed visual inspection, before further flight, do the actions specified in paragraph (c)(2) of this AD. Thereafter, repeat the detailed visual inspection specified by paragraph (b)(1) of this AD at intervals not to exceed 6 months.

#### Firewall Openings of the Strut Aft Bulkhead

(2) Do a detailed visual inspection of the firewall openings of the strut aft bulkhead to verify installation of seal backup plates and condition of the sealant application per Part 1 of the Accomplishment Instructions of the service bulletin.

(i) If no discrepancy (including damaged or missing seal backup plates, or damaged or missing sealant) is found, repeat the detailed visual inspection specified by paragraph (b)(1) of this AD at intervals not to exceed 6 months.

(ii) If the seal backup plates are not installed, before further flight, install the seal backup plates and apply heat-resistant sealant, BMS 5-63, per Part 2 of the Accomplishment Instructions of the service bulletin. Accomplishment of this action terminates the repetitive inspections required by this AD.

(iii) If the seal backup plates are installed, but the sealant application is damaged or missing, before further flight, remove any existing sealant and apply heat-resistant sealant, BMS 5-63, per Part 3 of the Accomplishment Instructions of the service bulletin. Accomplishment of this action terminates the repetitive inspections required by this AD.

**Note 2:** Because it is difficult to distinguish between BMS 5-95 and BMS 5-63 sealants, removal and replacement of the existing sealant is required to ensure that the correct heat-resistant sealant, BMS 5-63, is used.

#### New Requirements of This AD

##### Terminating Action and Corrective Action

(c) Within 18 months after the effective date of this AD: Do the action specified by paragraph (c)(1), (c)(2), or (c)(3) of this AD, as applicable. Accomplishment of the applicable action constitutes terminating action for the repetitive inspections required by this AD.

(1) Following the inspections required by paragraphs (b)(1) and (b)(2) of this AD, if no cracking or heat damage is found during those inspections, and the seal backup plates are installed, before further flight, remove any existing sealant and apply heat-resistant

sealant BMS 5-63, per Part 3 of the Accomplishment Instructions of Boeing Alert Service Bulletin 747-54A2208, dated March 29, 2001.

(2) If any sign of heat damage or cracking is found during the inspections required by paragraph (b) of this AD, before further flight, do the actions specified by either paragraph (c)(2)(i) or (c)(2)(ii) of this AD.

(i) Replace the diagonal brace per Part 4 of the Accomplishment Instructions of Boeing Alert Service Bulletin 747-54A2208, dated March 29, 2001;

(ii) Repair per a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA; or per data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair method to be approved by the Manager, Seattle ACO, as required by this paragraph, the Manager's approval letter must specifically reference this AD.

(3) If the seal back-up plates are not installed, before further flight, install the seal backup plates and apply heat-resistant sealant BMS 5-63, per Part 2 of the Accomplishment Instructions of the service bulletin.

#### Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

**Note 3:** Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

#### Special Flight Permits

(e) Special flight permits may be issued in accordance with 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Issued in Renton, Washington, on August 27, 2001.

**Kalene C. Yanamura,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 01-22089 Filed 8-31-01; 8:45 am]

**BILLING CODE 4910-13-U**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. 2000-NM-413-AD]

RIN 2120-AA64

#### Airworthiness Directives; Airbus Model A319, A320, and A321 Series Airplanes

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** This document proposes the superseding of an existing airworthiness directive (AD), applicable to certain Airbus Model A319, A320, and A321 series airplanes, that currently requires a one-time ultrasonic inspection to detect disbonding of the skin attachments at the stringers and spars of the vertical stabilizer, and repair, if necessary. For certain airplanes, that AD also requires prior or concurrent modification of the vertical stabilizer to ensure proper reinforcement of its attachment to the skin. This action would require ultrasonic inspections of the subject area, and repair, as necessary. It would also require installation of fasteners to reinforce the bonds to the skin, which would terminate the repetitive inspections. This proposal is prompted by issuance of mandatory continuing airworthiness information by a foreign civil airworthiness authority. The actions specified by the proposed AD are necessary to prevent failure of the bonds of the vertical stabilizer spar boxes to the skin, which could lead to reduced structural integrity of the spar boxes.

**DATES:** Comments must be received by October 4, 2001.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket Number 2000-NM-413-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays. Comments may be submitted via fax to (425) 227-1232. Comments may also be sent via the Internet using the following address: 9-anm-nprmcomment@faa.gov. Comments sent via fax or the Internet must contain "Docket No. 2000-NM-413-AD" in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must